

Name: **Dr. V. PRIYANKA BRAHMAIAH**

Designation: Assistant Professor

Department: ECE

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Experience (in years): 11 Teaching: 11 Research: 07

AICTE Id: 1-1489900777

Date of Birth: 19<sup>th</sup> August 1985

Others (if any, specify): Treasurer, IEEE Hyderabad Section Sensors

Council Chapter 2021-23,

IEEE Student Branch Counsellor, VNRVJIET



### 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D	2021	Bio-Medical Signal Processing
2	M. Tech	2010	VLSI SYSTEM DESIGN
3	B. Tech	2007	ECE
4	Secondary (10+2)	2003	MPC
5	10 <sup>th</sup>	2001	Maharashtra State Syllabus

### 2. Teaching and Learning:

2.1. Teaching Interests: VLSI Design, Electronic Devices and Circuits, Pulse and Digital Circuits, Analog Communications, Bio-Medical Instrumentation, Computer Organization, Introduction to Machine Learning, Digital System Design with FPGAs.

2.2. Novel Teaching & Learning Techniques adopted: WIT and WIL, Discussion Method, Brain storming, Mind mapping, POGIL, Story board.

2.3. Involvement in curriculum updating / Design: NA

### 3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Coins & Match Boxes Collection

3.2. CCA/ECA Organized: Technical fest Convergence faculty coordinator, IEEE activities held in institute, Women's Day Celebration in the institute.

3.3. CCA/ECA participated: Participated in Sports Under faculty in institute, Women's Day Celebration in the department.

3.4. Counselling and Mentoring Activity: 20 Students of Undergraduate in ECE stream

3.5. Committees involved in:

- Department level: NBA work -Student Internships, Professional Bodies Activities: IETE, ISTE and IEEE.
- Institute Level: Branch Counsellor, IEEE Student Branch of VNR VJIET, ISTE Awards committee member, IEEE IACC 2017 conference Finance committee member, Convergence 2k18,2k19 faculty coordinator, Annual Day faculty coordinator under refreshment committee, Faculty Advisor of Vignana Vartha News Bulletin, Faculty Advisor for Prevention of Sexual Harassment committee.

#### **4. Conference / Workshop / Seminar / Guest Lectures:**

4.1 Conducted: International conference: IEEE IACC 2017, IEEE ICMAAC 2022, Activities under IEEE in the institute and Hyderabad Section.

4.2 Attended: Several workshops related to technology and teaching learning methods.

#### **5. Academic Contribution and Research & Consultancy:**

##### 5.1. Invited Lectures:

- Delivered an expert talk on Digital Content for VNRVJIET Faculty and Staff. The session was part of 7-day FDP on “In-House Training on Video Content Development”, conducted on 20<sup>th</sup> to 25<sup>th</sup> July 2020.
- Delivered an expert talk on Digital Content for VNRVRS VJ School Faculty. The session was part of 7-day FDP on “In-House Training on Video Content Development”, conducted on 27<sup>th</sup> July to 1<sup>st</sup> August 2020.
- Delivered an expert talk on Digital Content for VJIM Faculty and Staff. The session was part of 7-day FDP on “In-House Training on Video Content Development”, conducted on 22<sup>nd</sup> to 27<sup>th</sup> June 2020.
- A session on Utilization of Digital Platforms was delivered in the FDP program of Digital Transformation conducted by IEEE WIE Hyderabad Affinity Group on 5<sup>th</sup> -8<sup>th</sup> July 2021.
- Delivered a talk on “Sensors and Importance of Sensors Council” in Vardhaman Engineering College on 20<sup>th</sup> & 21<sup>st</sup> October 2021. The talk was part of a two-day workshop on The Role of Sensors in Industrial Automation.
- Delivered a talk on” Importance of Sensors Council Chapter and its initiatives at Student Branches” in Women in Sensors- Security and Health conducted by IEEE Sensors Council Hyderabad Chapter on 17th November 2022.The event was conducted in BVRIT HYDERABAD College of Engineering for Women, Hyderabad.

##### 5.2. Articles/Chapters published in Books: NA

##### 5.3. Books published as single author or as editor: 01

- Dr.V.Priyanka Brahmaiah, Dr.Y.Padma Sai Published a book titled," Detection of Epileptic Seizure in Early stage: Using Electrooculogram Signals" in LAP LAMBERT Academic Publishing on January 4, 2022. Publication details are as follows: ISBN-10 : 6204734946, ISBN-13 : 978-6204734941

##### 5.4. Projects Guided :

- a) UG : 16 related to present and mesmerizing technologies
- b) PG : 11 related to present technologies

##### 5.5. Research Interests : Bio Medical Signal Processing.

##### 5.6. Ph.D students :

- a) Enrolled :
- b) Submitted:
- c) Awarded:

##### 5.7. Papers published in reviewed journals:

<b>S.No</b>	<b>Title of the Paper</b>	<b>Journal Name Vol. No. PP</b>	<b>ISBN/ISSN No.</b>	<b>Impact Factor/ Citation Index</b>	<b>National/ International</b>
1	FPGA Implementation of Electrooculogram using Discrete Wavelet Transform	International Journal of Electronics and Communication Engineering Volume 5, Number 3 (2012), pp. 304-310	ISSN 0974-2166	1.5	International
2	Built-In-Self-Repair for Embedded RAMS with PMBIST or Efficient Fault Coverage	International Journal of Advances in Engineering & Technology. Vol: 6, Issue:5 (2013), Page No: 2262-2273	ISSN: 22311963	1.8896	International
3	Study on Comparison of Various Multipliers	International Journal of Electronics and Communication Engineering & Technology Volume 4, Issue 5, September – October 2013, pp. 132-142	ISSN 0976 – 6464(Print ), ISSN 0976 – 6472(Online).	5.8896	International
4	Universal Modulator Using Cordic Algorithm for Communication Application	International Journal of Advances in Engineering & Technology Vol: 6, Issue: 6 (2014), Page No: 2480-2488	ISSN: 22311963	1.8896	International
5	FPGA Implementation of Lossless Compression of Medical Images Using VLSI –Oriented Felics Algorithm	International Journal of Research in Information Technology Vol: 1, Issue: 12 (2013), Page No: 264-273	ISSN: 2001-5569	1.9	International
6	Implementation and Analysis of an Electrooculography (EOG) Signal on FPGA	International Journal of Advanced Engineering Research and Technology (IJAERT) Volume 5 Issue 11, November 2017	ISSN No.: 2348 – 8190	Google Scholar	International

7	Performance and Analysis of EOG Signal through Eye Movements	Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 14-Special Issue, 2018	ISSN 1943-023X	ESCI	International
8	Design & Verification of Serial Peripheral Interface (SPI) Protocol	J-International Journal of Recent Technology and Engineering (IJRTE), Volume-8 Issue-6, March 2020	ISSN: 2277-3878	6.04	International
9	MAYDAY, A WOMEN SAFETY DEVICE	J-Advanced Science Letters Volume-26, Number 5 May 2020	E-ISSN:1936-7317	5.1	International
10	V.Priyanka Brahmaiah, Y.Padma Sai and M.N.Giri Prasad,“ A New Framework for Recognizing Normal and Epileptic Seizure from Eye Movement Signals Using Genetic Based Convolutional Neural Network”,	Traitement du Signal, Volume 37, Number 3	August 2020	Indexed in SCIE	International
11	FPGA Implementation Of 4-Bit ALU Using Reversible Logic Gates	Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12, Issue 5, PP : 3579- 3592	May, 2021	Indexed in Scopus	International
12	Accurate and Efficient Differentiation Between Normal and Epileptic Seizure of Eyes Using 13 Layer Convolution Neural Network	Traitement du Signal, Volume 38, Number 4, 2021 PP: 1161-1169	August 2021	Indexed in SCIE Impact Factor (JCR) 2.589	International
13	Intelligent assistant to predict and control the home appliances in user environment through brain computer interface using hybrid deep learning model	Journal of Complementary Medicine Research, ISSN: 2146-8397 Vol. 14, No. 2, 2023 (pp.150-156)	Feb 15, 2023	Indexed in Scopus	International

14	Automated detection of cardiac arrest in human beings using auto encoders.	Measurement: Sensors, 2023,ISSN 2665-9174,doi.org/10.1016/j.measen.2023.100792	Available online 13 May 2023	Indexed in Scopus	International
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5.8.Papers presented at National / International Conferences :

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Telugu Text to Speech System for Mobile Based Systems	Fifth International Conference on Recent Trends in Information, Telecommunication and Computing – ITC 2014	International	Mar 21-22, 2014, Chandigarh, India
2	Speech Emotion Recognition by MFCC Coefficients and Support Vector Machines	First International Conference on Large Area & Flexible Microelectronics	International	December 18 -20, 2014, Bangalore
3	Finger Snap based Biometric Authentication Mechanism	XRCI Open 2015	International	January 21-22,2015 at Xerox, Bangalore.
4	Cough classification tool for early detection and Recovery monitoring of tuberculosis and asthma	IEEE conference on Computing, Communication and Sensor Network	International	24-25th December 2017, Kolkata, India
5	Implementation of Speech Based Stress Level Monitoring System	IEEE conference on Computing, Communication and Sensor Network	International	24-25th December 2017, Kolkata, India
6	Design of Carry Save Adder Using Subthreshold Dual Mode Logic	IEEE conference on Computing, Communication and Sensor Network	International	24-25th December 2017, Kolkata, India

7	Data Acquisition System Of Electrooculogram	2017 IEEE 7th International Advance Computing Conference	International	4th-7th Jan 2017, Hyderabad, India
8	Design of power management unit using mixed voltage buffer	2017 IEEE 7th International Advance Computing Conference	International	4th-7th Jan 2017, Hyderabad, India
9	Role of Artificial Intelligence-Robots during COVID-19 Pandemic and its Technological limits: A Review	International Conference on Artificial Intelligence: Theory & Applications AITA-2021	International	23-24 <sup>th</sup> December 2021, Dept. of ECE, NIT Patna, India
10	An Efficient Approach for Denoising ECG Signal Using FIR Filter	2022 International Conference on Intelligent Innovations in Engineering and Technology (ICIET - 2022)	International	22nd September 2022 to 24th September 2022. Conducted by Department of ECE, PSG College of Technology in collaboration with IEEE Madras Section, Coimbatore, Tamil Nadu, India.
11	An Efficient Method for the Data Monitoring	2022 International Conference on Intelligent Innovations in Engineering and Technology (ICIET - 2022)	International	22nd to 24th

	Of Photovoltaic Solar Panel			September 2022. Conducted by Department of ECE, PSG College of Technology in collaboration with IEEE Madras Section, Coimbatore, Tamil Nadu, India.
12	An Efficient Pulse Detector with Arduino and IR Sensor	2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT)	International	3 <sup>rd</sup> to 5 <sup>th</sup> October 2022. Conducted by IIT Kharagpur, India
13	Design of Area and Power Optimized VLSI Architecture of ALU Design Using Signed Multiplier	2022 International Conference on Recent Trends in Microelectronics, Automation, Computing and Communications Systems (ICMACC), Hyderabad, India, 2022, pp. 276-280, doi: 10.1109/ICMACC54824.2022.10093559.	International	28 <sup>th</sup> to 30 <sup>th</sup> December 2022. Conducted by VNRVJIET in association with IEEE Hyderabad section.
14	Implementation of AES Algorithm	7th International Conference on ICT for Intelligent Systems (ICTIS – 2023)	International	Ahmedabad during April 27-28, 2023

#### 5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
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#### 5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
1	IEEE SPS Summer School on Internet of Things for Biomedical and Healthcare Applications	IEEE Hyderabad section , IEEE signal processing society and IEEE WIE AG Hyderabad Section	28th December to 31st December 2020	Rs.2,20,440	Completed
2	IEEE SPS Seasonal School on “Recent advances in Artificial Intelligence for Signal Processing”	IEEE Hyderabad section , IEEE signal processing society and IEEE WIE AG Hyderabad Section	28th December to 31st December 2021	Rs.2,20,587	Completed
3	IEEE SPS Student Branch Chapter Initiative on Latest Trends in Machine Learning for Signal Processing Applications	IEEE Hyderabad section , IEEE signal processing society	10th to 12th August 2022	Rs.3,14,944	Completed
4	IEEE NTC Summer School on Fabrication and Characterization of Nanomaterials	IEEE Hyderabad section , IEEE Nanotechnology society	16th-19th November,2022	Rs.3,31,244	Completed

**6. Awards / Honors received:** Stood first in Design Thinking competition conducted in our institute

**7. Motto:** To work in challenging environment as an active member in a team towards the accomplishment of Institutional goals and to achieve success in my career and prove to be an asset to the organization.